UNITED STATES PATENT AND TRADEMARK OFFICE

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10/045,556	01/11/2002	Roy Frank Brabson	RSW920010159US1	1822

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EXAMINER
CHANKONG, DOHM

ART UNIT	PAPER NUMBER
2452	

NOTIFICATION DATE	DELIVERY MODE
06/10/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2010*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-21* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *2-21* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This non-final rejection is in response to Applicant's amendment filed on 8/31/2010 and

the Board of Patent Appeals and Interference's decision rendered on 4/30/2010 ["the Board

decision"]. Applicant amends claims 2, 10-13, and 17 and cancels claims 1 and 22-24.

Accordingly, Applicant presents claims 2-21 for further examination.

I.   REOPENING PROSECUTION AFTER A BOARD DECISION

The Board decision reversed the rejection of claims 1-7, 9-12, 17-21, and 23 under 35

U.S.C. § 102(b) as being anticipated by *Buhrke* and the rejection of claim 8 under 35 U.S.C. §

103(a) as being unpatentable over *Buhrke* in view of Nahidipour. The Board decision did sustain

the rejection of claims 1 and 13-16 under 35 U.S.C. § 102(b) as being anticipated by *Yamato*.

In response, Applicant cancelled claim 1 and included claim 1's limitations into

dependent claims 2, 10-13, and 17. While MPEP § 2682 IV(A) states that "reopening

prosecution of a case after a decision by the Board should be a rare occurrence", cases may be

reopened when "the written consent of the Director of the USPTO is obtained for the

consideration of matters not already adjudicated, where sufficient cause has been shown."

MPEP § 1214.04 further allows that:

"If the examiner has specific knowledge of the existence of a particular reference or
references which indicate nonpatentability of any of the appealed claims as to which the
examiner was reversed, he or she should submit the matter to the Technology Center (TC)
Director for authorization to reopen prosecution under 37 CFR 1.198 for the purpose of entering
the new rejection."

In this particular case, the examiner did have specific knowledge of another reference which indicates nonpatentability of the appealed claims. The TC Director's approval may be found below.

II.   RESPONSE TO ARGUMENTS

Applicant's arguments with respect to claims 2-12 and 17-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant amends claim 13 to include the limitations of cancelled claim 1. However, the Board decision clearly *affirmed* the § 102(b) rejection of claims 1 and 13-16 as being anticipated by *Yamato* [see pgs 8-9]. Therefore, Applicant's amended incorporation of the limitations of claim 1 into claim 13 does not overcome the *Yamato* reference. The rejection of claims 13-16 is therefore maintained.

III.   CLAIM REJECTIONS – 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

**A.   Claims 2, 4, 9-12, and 17-21 are rejected under 35 U.S.C. § 102(e) as being
anticipated by *Moore* et al., U.S. Patent Publication No. 20020032780
["*Moore*"].**

Claim 2

Moore discloses a method of improving traffic management in a computing network,

comprising steps of:

detecting a changed environmental condition [0031: disclosing logic that senses (i.e.,

detects) a change in a network medium's characteristics (i.e., environmental condition)];

generating a notification of the detected condition [0031: disclosing that the logic informs

(i.e., notifies) applications of the network change];

analyzing the generated notification by consulting one or more criteria [0031: disclosing

informing applications of the change "so that they may react appropriately" | 0055, 0058:

disclosing that a notification is passed to an application and respond to the notification by tuning

their behavior "in the most optimal manner possible" (i.e., analyzing the notification by

consulting different configurations of the application)];

determining at a currently-executing application, based on the analysis, whether the

currently-executing application should modify a behavior of the currently-executing application

[0058: determining how to tune the behavior of the application]; and

modifying, by the currently-executing application, the behavior of the currently-

executing application [0088: disclosing applications adapting their behavior based on the nature

of the network | 0081, 0082: providing an example of a browser application modifying its

behavior to use a proxy server].

Claim 4

Moore discloses the modification comprises reducing data retrieval by the currently-

executing application [0086: disclosing that the application may throttle the send rate of packets].

Claim 9

Moore discloses the modification comprises changing the currently-executing

application's use of one or more other applications [0050: the application reroutes

communications through a different network interface (i.e., application)].

Claim 10

Moore discloses a method of improving traffic management in a computing network,

comprising steps of:

detecting a changed environmental condition [0031: disclosing logic that senses (i.e.,

detects) a change in a network medium's characteristics (i.e., environmental condition)];

generating a notification of the detected condition [0031: disclosing that the logic informs

(i.e., notifies) applications of the network change];

analyzing the generated notification by consulting one or more criteria [0031: disclosing

informing applications of the change "so that they may react appropriately" | 0055, 0058:

disclosing that a notification is passed to an application and respond to the notification by tuning

their behavior "in the most optimal manner possible" (i.e., analyzing the notification by

consulting different configurations of the application)];

determining at a currently-executing application, based on the analysis, whether the

currently-executing application should modify a behavior of the currently-executing application

[0058: determining how to tune the behavior of the application]; and

wherein the changed environmental condition pertains to system-related conditions

[0077: sensing that the application is not connected to a network (i.e., the system on which the

application is executing disconnects from the network)].

Claim 11

Moore discloses a method of improving traffic management in a computing network,

comprising steps of:

detecting a changed environmental condition [0031: disclosing logic that senses (i.e.,

detects) a change in a network medium's characteristics (i.e., environmental condition)];

generating a notification of the detected condition [0031: disclosing that the logic informs

(i.e., notifies) applications of the network change];

analyzing the generated notification by consulting one or more criteria [0031: disclosing

informing applications of the change "so that they may react appropriately" | 0055, 0058:

disclosing that a notification is passed to an application and respond to the notification by tuning

their behavior "in the most optimal manner possible" (i.e., analyzing the notification by

consulting different configurations of the application)];

determining at a currently-executing application, based on the analysis, whether the

currently-executing application should modify a behavior of the currently-executing application

[0058: determining how to tune the behavior of the application]; and

wherein the changed environmental condition pertains to network-related conditions

[0080: disclosing that there is a change in a network connection].

Claim 12

Moore discloses a method of improving traffic management in a computing network,

comprising steps of:

detecting a changed environmental condition [0031: disclosing logic that senses (i.e.,

detects) a change in a network medium's characteristics (i.e., environmental condition)];

generating a notification of the detected condition [0031: disclosing that the logic informs

(i.e., notifies) applications of the network change];

analyzing the generated notification by consulting one or more criteria [0031: disclosing

informing applications of the change "so that they may react appropriately" | 0055, 0058:

disclosing that a notification is passed to an application and respond to the notification by tuning

their behavior "in the most optimal manner possible" (i.e., analyzing the notification by

consulting different configurations of the application)];

determining at a currently-executing application, based on the analysis, whether the

currently-executing application should modify a behavior of the currently-executing application

[0058: determining how to tune the behavior of the application]; and

wherein the changed environmental condition pertains to client-related conditions in one or more clients of the currently-executing application [0077: sensing that the application is not connected to a network (i.e., the system on which the application is executing disconnects from the network)].

Claim 17

Moore discloses a method of improving traffic management in a computing network, comprising steps of:

detecting a changed environmental condition [0031: disclosing logic that senses (i.e., detects) a change in a network medium's characteristics (i.e., environmental condition)];

generating a notification of the detected condition [0031: disclosing that the logic informs (i.e., notifies) applications of the network change];

analyzing the generated notification by consulting one or more criteria [0031: disclosing informing applications of the change "so that they may react appropriately" | 0055, 0058: disclosing that a notification is passed to an application and respond to the notification by tuning their behavior "in the most optimal manner possible" (i.e., analyzing the notification by consulting different configurations of the application)];

determining at a currently-executing application, based on the analysis, whether the currently-executing application should modify a behavior of the currently-executing application [0058: determining how to tune the behavior of the application]; and

wherein the changed environmental condition occurred externally to a system in which the currently-executing application is executing [0038-0039: change in network conditions which is external to the currently-executing application].

Claim 18

Moore discloses the generated notification pertains to a condition of a client of the currently-executing application [0055: disclosing notifications | 0077: sensing that the application is not connected to a network (i.e., the system on which the application is executing disconnects from the network)].

Claim 19

Moore discloses the generated notification pertains to a condition of a remote network platform [0072: detecting a change in response time from "some other device on the network" (i.e., remote network platform) | 0085: for example, the remote platform may be a network printer].

Claims 20 and 21

Moore discloses the generated notification pertains to a condition of a remote server with which the currently-executing application is communicating, wherein the modification comprises making adjustments pertaining to the remote server [0084: disclosing that the client notices a change in the server's addresses and changes behavior by communicating with the new server addresses].

B.   **Claims 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by *Yamato* et al., U.S. Patent No. 5,835,484 ["*Yamato*"].**

On pages 8-9, the Board decision affirmed these rejections and are also rejected for at least the same reasons set forth in that decision.

Claim 13

Yamato discloses a method of improving traffic management in a network, comprising steps of:

detecting a changed environmental condition (e.g. detecting violations in

environment, congestion state [column 6 «lines 30-35 and 45-55 | column 12 «line 15»] ;

generating notification of the detected condition [column 12 «lines 17-19 and 59-

60»];

analyzing the generated notification by consulting one or more criteria [column

12 «lines 33-39»: analyzing and consulting monitoring parameters];

determining, at a currently executing application, based on the analysis, whether

the currently executing application should modify a behavior of the currently-execution

application [column 12 «lines 34-40»: *Yamato*'s cell traffic regulation unit is interpreted

as a currently executing application which makes a determination to modify application

monitoring parameters].

wherein the changed environmental condition occurred internally in to a system in which

the currently executing application is executing [column 7 «lines 40-45» | system of fig 1].

Claim 14

Yamato discloses the method according to claim 13 wherein the generated notification

pertains to a condition of a local network protocol stack [column 7 «lines 20-39» | column 8

«lines 10-15»: condition indicator within a payload field of a header-31 where the indicator is

used to determine existence of condition; if condition exists a notification is sent].

Claim 15

Yamato discloses the method according to claim 13, wherein the generated notification

pertains to a condition of the system in which the currently executing application is executing

[column 5 «lines 53-60»: execution of a program for monitoring connection-121].

Claim 16

Yamato discloses the method of claim 13, wherein the analyzing step is performed by a

policy manager component of the system in which the currently-executing application is

executing [Figure 1 «item 203»].

IV. CLAIM REJECTIONS – 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

A.   **Claims 3, 6, and 7 are rejected under 35 U.S.C § 103(a) as being unpatentable
       over *Moore* in view of *Patel*, U.S. Patent No. 6889257.**

Claims 3, 6

Moore as modified by discloses the modification comprises reducing or increasing the

size of one of more data objects generated by the currently executing application [*Moore*, 0039:

disclosing sensing a change in the maximum packet size allowed in the network & *Patel*, column

5 «lines 11-21»: disclosing increasing or decreasing size of packets in response to network

conditions (see column 4 «lines 58-60»)].

Moore discloses that an application may detect a change in the maximum packet size

allowed in a network and that the application may react accordingly. Such a disclosure implies

that if the maximum packet size were reduced, then an application would reduce the size of

packets. Similarly, if the maximum packet size were increased, then an application would increase the size of packets.

But *Moore* does not explicitly teach increasing or decreasing the size of packets. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Patel*. As cited in the foregoing mapping, *Patel* discloses a server (i.e., Applicant's application) that detects a change in a system condition and may make adjustments to the size of a packet in response to the change.

It would have been obvious to one of ordinary skill in the art to have modified *Moore*'s invention to include *Patel*'s feature of adjusting the packet size in response to changes in conditions. Such a modification to *Moore* is an example of using a known technique (*Patel*'s adjustment of packet size in response to network conditions) to improve similar methods (*Moore*'s method of allowing applications to react to changes in network conditions) in the same way (*Moore*'s applications would have the function of adjusting packet sizes). *See* MPEP § 2143.

Claim 7

Moore as modified by *Patel* discloses the modification comprises increasing data retrieval by currently-executing application [Patel column 5 «lines 11-20»: disclosing increasing the frequency of transmission of data packets].

It would have been obvious to one of ordinary skill in the art to have modified *Moore*'s invention to include *Patel*'s feature of increasing data retrieval in response to changes in conditions. Such a modification to *Moore* is an example of using a known technique (*Patel*'s increase of data retrieval in response to network conditions) to improve similar methods

(*Moore*'s method of allowing applications to react to changes in network conditions) in the same

way (*Moore*'s applications would have the function of increasing data retrieval). *See* MPEP §

2143.

      B.   **Claim 5 is rejected under 35 U.S.C § 103(a) as being unpatentable
over *Moore* in view of *Buhrke* et al., U.S. Patent No. 5280470 ["*Buhrke*"].**

Moore as modified by *Buhrke* discloses the modification comprises dropping one or more

connections with the currently executing application [Buhrke, column 6 «lines 33-49»: e.g.

disconnection of a virtual channel].

      It would have been obvious to one of ordinary skill in the art to have modified *Moore*'s

invention to have included the feature of dropping connections as a means of adjusting to

changes in network conditions as taught in *Buhrke*. Such a modification to *Moore* is an example

of using a known technique (*Buhrke*'s dropping of a connection to deal with a change in network

conditions (e.g., congestion)) to improve similar methods (*Moore*'s method of allowing

applications to react to changes in network conditions) in the same way (*Moore*'s applications

would have the function of dropping connections in times of congestion as taught in *Buhrke*).

See MPEP § 2143.

      C.   **Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Moore*
in view of *Nahidipour* et al., U.S. Patent No. 5983723 ["*Nahidipour*"].**

Moore as modified by Nahidipour discloses wherein modification comprises changing

thread assignments of the currently executing application [*Nahidipour*, column 5 «lines 45-56»:

changing thread assignments (e.g., reducing threads) of a currently executing application in order

to ensure improved data transfer efficiency, lower utilization of system resources, and memory].

It would be obvious to one of ordinary skill in the art at the time of the invention to have modified *Moore*'s invention to include the feature of changing thread assignments (e.g. reducing threads) of a currently executing application, as taught by *Nahidipour* et al. in order to ensure improved data transfer efficiency, lower utilization of system resources, and memory as number of threads for system calls is reduced [see *Nahidipour*, column 5 «lines 45-56» | column 8 «lines 37-43»].

V.   CONCLUSION

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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